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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/781,948	02/20/2004	Yoshikumi Miyamoto	4496-3	9702

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NIXON & VANDERHYE, PC
901 NORTH GLEBE ROAD, 11TH FLOOR
ARLINGTON, VA 22203

EXAMINER	
ONEILL, KARIE AMBER	
ART UNIT	**PAPER NUMBER**
1745	

DATE MAILED: 07/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/781,948	MIYAMOTO ET AL.	
	Examiner	Art Unit	
	Karie O'Neill	1745	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *20 February 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-8* is/are pending in the application.

4a) Of the above claim(s) *7 and 8* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-6* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *20 February 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *2-20-04, 6-21-06*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Remarks

1. Applicant's election without traverse of Claims 1-6 in the reply filed on June 21, 2006, is acknowledged. Therefore, Claims 7 and 8 are withdrawn from consideration.

Claim Rejections - 35 USC § 102

Claim Rejections - 35 USC § 103

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Yamashita et al. (US 6,387,564 B1).

With regard to Claim 1, Yamashita et al. discloses a non-aqueous electrolyte secondary battery having a coiled electrode assembly made through the multi-layer winding (column 9 lines 31-38) of: a positive electrode having a metallic collector, made of

aluminum foil (column 16 lines 10-11), coated with a positive electrode mixture, composed of a positive electrode active material that occludes and liberates lithium ions (column 8 lines 18-20)); a negative electrode having a metallic collector, made of copper foil (column 16 lines 23-24), coated with a negative electrode mixture, composed of a negative electrode active material that occludes and liberates lithium ions (column 8 lines 26-31); and a separator interposed between the positive electrode and the negative electrode (column 3 lines 6-10), wherein the positive electrode has an aggregation layer of insulating material on a portion of the positive electrode metallic collector uncoated with the positive electrode mixture and opposed to a part of the negative electrode coated with the negative electrode mixture through the separator (column 3 lines 12-20).

Claim 1 has been construed as a product-by-process claim. Product-by-process claims are not limited to the manipulations of the recited steps, only the structure implied by the steps. "Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). Since Yamashita's non-aqueous electrolyte secondary battery is similar to that of the Applicant's, Applicant's process is not given patentable weight in this claim.

With regard to Claim 2, Yamashita et al. discloses the insulating material particles having a thickness ranging from 1μm to 100μm and, more preferably, from 10μm to 50μm (column 6 lines 15-18).

With regard to Claim 3, Yamashita et al. discloses the insulating material covering part of the positive electrode mixture (column 3 lines 12-18).

With regard to Claim 4, Yamashita et al. discloses the insulating material particles having a thickness ranging from 1μm to 100μm and, more preferably, from 10μm to 50μm (column 6 lines 15-18) and also covering part of the positive electrode mixture (column 3 lines 12-18).

With regard to Claim 5, Yamashita et al. discloses the positive electrode mixture layer covering a part of the insulating layer, with the entire surface of the positive electrode mixture layer being of uniform thickness formed of a slurry coated on the surface of the positive electrode current collector with a thickness of 15μm (column 16 lines 10-15).

With regard to Claim 6, Yamashita et al. discloses the insulating material particles having a thickness ranging from 1μm to 100μm and, more preferably, from 10μm to 50μm (column 6 lines 15-18) and the positive electrode mixture layer covering a part of the insulating layer, with the entire surface of the positive electrode mixture layer being of uniform thickness formed of a slurry coated on the surface of the positive electrode current collector with a thickness of 15μm (column 16 lines 10-15).

5. Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Nakai (JP 09-213338).

With regard to Claim 1, Nakai discloses a non-aqueous electrolyte secondary battery having a coiled electrode assembly made through the multi-layer winding (paragraph 0007) of: a positive electrode having a metallic collector, an aluminum thin film (paragraph 0010), coated with a positive electrode mixture composed of a positive

electrode active material that occludes and liberates lithium ions (paragraphs 0012 and 0023); a negative electrode having a metallic collector, a copper thin film (paragraph 0010), coated with a negative electrode mixture composed of a negative electrode material that occludes and liberates lithium ions (paragraphs 0012 and 0023); and a separator interposed between the positive electrode and the negative electrode (paragraph 0007), wherein the positive electrode has an insulating layer, resin film or resin sheet (paragraph 0008), on a portion of the metallic collector and opposed to a part of the negative electrode coated with the negative electrode mixture through the separator (paragraph 0011 and Drawing 2).

Claim 1 has been construed as a product-by-process claim. Product-by-process claims are not limited to the manipulations of the recited steps, only the structure implied by the steps. "Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). Since Yamashita's non-aqueous electrolyte secondary battery is similar to that of the Applicant's, Applicant's process is not given patentable weight in this claim.

With regard to Claim 2, Nakai discloses in Drawing 2, the resin film or sheet (6a, 8a) having a thickness of 10 micrometers (paragraphs 0012- 0013).

With regard to Claim 3, Nakai discloses in Drawing 1, the resin film (6a) also covers a part of the positive electrode mixture coating (7) because the positive electrode active

materials (7) are formed on the side of the current collection construct (6) which is made up of the resin film (6a) and charge collector (6b) (paragraph 0012).

With regard to Claim 4, Nakai discloses in Drawing 2, the resin film or sheet (6a) having a thickness of 10 micrometers (paragraphs 0012- 0013) and covering a part of the positive electrode mixture coating (7) because the positive electrode active materials (7) are formed on the side of the current collection construct (6) which is made up of the resin film (6a) and charge collector (6b) (paragraph 0012).

With regard to Claim 5, the positive electrode mixture layer covers a part of the resin film or sheet, as noted above and in Drawing 1, with the entire surface of the positive electrode mixture layer being of uniform thickness at 100 micrometers (paragraph 0012).

With regard to Claim 6, Nakai discloses in Drawing 2, the resin film or sheet (6a, 8a) having a thickness of 10 micrometers (paragraphs 0012- 0013) and the positive electrode mixture layer covers a part of the resin film or sheet, as noted above and in Drawing 1, with the entire surface of the positive electrode mixture layer being of uniform thickness at 100 micrometers (paragraph 0012).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karie O'Neill whose telephone number is (571) 272-8614. The examiner can normally be reached on Monday through Friday from 8am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached on (571) 272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Karie O'Neill
Examiner
Art Unit 1745

KAO

DAH-WEI YUAN
PRIMARY EXAMINER